

Material Safety Data Sheet

24 Hour Emergency Phone Numbers:

Medical: 1-800-327-3874

1-513-558-5111

Transportation:

1-800-535-5053

1-352-323-3500

NOTE: National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

IMPORTANT: Provide this information to employees, customers, and users of this product. Read this MSDS before handling or disposing of this product. This product is covered by the OSHA Hazard Communication Standard and this document has been prepared in accordance with requirements of this standard. All abbreviated terms used in this MSDS are further described in Section 16.

Section 1 - Chemical Product / Company Information

This Material Safety Data Sheet is available in Canadian French and Hispanic American Spanish upon request.
Esta hoja de datos de la seguridad de los materiales está disponible en francés canadiense y en español a su solicitud.
Los Datos de Seguridad del Producto pueden obtenerse en Espanol si lo requiere.

Product Name: DAP DYNAFLEX 230 – ALL COLORS
Product UPC Number: 05998 18275 18280 18286 18288 18316 74096 18412 18418 18420 18607 74084 74086 74108
Product Use/Class: Latex Caulk
Manufacturer: DAP Inc.
2400 Boston Street Suite 200
Baltimore, MD 21224-4723
888-327-8477 (non-emergency matters)

Revision Date: 04/18/2005
Supersedes: 08/30/2002
MSDS Number: 00010001001

Section 2 - Composition / Information On Ingredients

Chemical Name	CASRN	WT%	ACGIH TWA	ACGIH STEL	ACGIH CEIL	OSHA TWA	OSHA STEL	OSHA CEIL	Skin
Calcium carbonate	1317-65-3	30-60	10 MGM3	N.E.	N.E.	5 MGM3	N.E.	N.E.	No
Di(C7&C9) ester branched & linear	PHthalate ESTER	1-5	N.E.	N.E.	N.E.	N.E.	N.E.	N.E.	No
Titanium dioxide	13463-67-7	1-5	10 MGM3	N.E.	N.E.	15 MGM3	N.E.	N.E.	No
Ethylene glycol	107-21-1	0.5-1.5	N.E.	N.E.	100 MGM3	N.E.	N.E.	N.E.	No
Silica, crystalline	14808-60-7	0.1-1.0	0.05 MGM3	N.E.	N.E.	(10 ÷ % SiO ₂) / 2 MGM3	N.E.	N.E.	No
Carbon Black	1333-86-4	0.0-1.5	3.5 MGM3	N.E.	N.E.	3.5 MGM3	N.E.	N.E.	No
Ammonia	7664-41-7	<0.010	25 PPM	35 PPM	N.E.	50 PPM	N.E.	N.E.	No
Formaldehyde	50-00-0	<0.03	N.E.	N.E.	0.3 PPM	0.75 PPM	2 PPM	N.E.	No
Ethyl acrylate	140-88-5	<0.02	5 PPM	15 PPM	N.E.	25 PPM	N.E.	N.E.	Yes
Acetaldehyde	75-07-0	<0.003	N.E.	N.E.	25 PPM	200 PPM	N.E.	N.E.	No
Acrylonitrile	107-13-1	<0.0004	2 PPM	N.E.	N.E.	2 PPM	10 PPM	N.E.	Yes

Exposure Notes:

107-13-1 Acrylonitrile is a specially regulated substance for which an OSHA chemical-specific exposure standard exists. Detailed information regarding this substance may be found in 29 CFR 1910.1045. Medical surveillance information regarding this substance may be found in Appendix C to

29 CFR 1910.1045.

50-00-0 Formaldehyde is a specially regulated substance for which an OSHA chemical-specific exposure standard exists. Detailed information regarding this substance may be found in 29 CFR 1910.1048. Medical surveillance information regarding this substance may be found in Appendix C to 29 CFR 1910.1048.

Important: Listed Permissible Exposure Levels (PEL) are from the U.S. Dept. of Labor OSHA Final Rule Limits (CFR 29 1910.1000); these limits may vary between states.

Note: An employee's skin exposure to substances having a "YES" in the "SKIN" column in the table above shall be prevented or reduced to the extent necessary under the circumstances through the use of gloves, coveralls, goggles or other appropriate personal protective equipment, engineering controls or work practices

Section 3 - Hazards Identification

Emergency Overview: A colored paste with a very slight ammonia odor. **WARNING!** Harmful if swallowed or absorbed through the skin. May cause eye, skin, nose, throat and respiratory tract irritation. This product contains ethylene glycol.

Refer to other MSDS sections for other detailed information.

Effects Of Overexposure - Eye Contact: May cause eye irritation.

Effects Of Overexposure - Skin Contact: Harmful if absorbed through the skin. May cause allergic reaction or sensitization by skin contact. May cause skin irritation and/or dermatitis.

Effects Of Overexposure - Inhalation: May cause irritation of respiratory tract. Prolonged, repeated, or high exposures may cause weakness and depression of the central nervous system. Inhalation of vapors may cause irritation of the nose, throat, lungs and respiratory tract.

Effects Of Overexposure - Ingestion: Harmful if swallowed.

Effects Of Overexposure - Chronic Hazards: Prolonged and repeated skin contact may cause irritation and possibly dermatitis. Repeated or prolonged exposure may cause respiratory system damage.

Overexposure may cause kidney, cardiovascular, skin and liver damage. Ethylene Glycol may cause kidney and liver damage upon prolonged and repeated overexposures. Studies have shown that repeated inhalation of ethylene glycol has produced adverse cardiovascular changes in laboratory animals. Ethylene glycol has been shown to cause birth defects in laboratory animals.

Primary Route(s) Of Entry: Skin Contact, Inhalation, Eye Contact

Medical Conditions which May be Aggravated by Exposure: None known.

Section 4 - First Aid Measures

First Aid - Eye Contact: In case of contact, immediately flush eyes with large quantities of water for at least 15 minutes until irritation subsides. Get medical attention immediately.

First Aid - Skin Contact: Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical aid if symptoms persist. Remove and wash contaminated clothing.

First Aid - Inhalation: If inhaled, remove to fresh air. If breathing is difficult, leave the area to obtain fresh air. If

continued breathing difficulty is experienced, get medical attention immediately.

First Aid - Ingestion: If swallowed, DO NOT INDUCE VOMITING. Get medical attention immediately.

Note to Physician: None.

COMMENTS: Call Medical Emergency at 1-800-327-3874 if any irritation or complication arises from any of the above routes of entry.

Section 5 - Fire Fighting Measures

Flash Point, F: >200 °F
Method: (Setaflash Closed Cup)

Lower Explosive Limit, %: Not Established
Upper Explosive Limit, %: Not Established

Extinguishing Media: Carbon Dioxide, Dry Chemical, Foam, Water Fog

Unusual Fire And Explosion Hazards: No special protective measures against fire required.

Special Firefighting Procedures: Wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear. Use water spray to cool exposed surfaces.

Section 6 - Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Wear proper protective equipment as specified in Section 8. Use absorbent material or scrape up dried material and place in container.

Section 7 - Handling And Storage

Handling: KEEP OUT OF REACH OF CHILDREN! DO NOT TAKE INTERNALLY. Do not breathe vapors. Use only with adequate ventilation. Wash thoroughly after handling. Avoid breathing vapor and contact with eyes, skin and clothing. Open all windows and doors or use other means to ensure cross-ventilation and fresh air entry during application and drying. Odor is not an adequate warning for hazardous conditions.

Storage: Close container after each use. Store containers away from excessive heat and freezing. Do not store at temperatures above 120 degrees F. Store away from caustics and oxidizers.

Section 8 - Exposure Controls / Personal Protection

Precautionary Measures: Please refer to other sections and subsections of this MSDS.

Engineering Controls: Good general ventilation should be sufficient to control airborne levels. Ensure adequate ventilation, especially in confined areas. Local ventilation of emission sources may be necessary to maintain ambient concentrations below recommended exposure limits.

Respiratory Protection: In case of insufficient ventilation, wear suitable respiratory equipment. A NIOSH-approved air purifying respirator with an organic vapor cartridge or canister may be necessary under certain circumstances where airborne concentrations are expected to exceed exposure limits. A respiratory protection program that meets the OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

Skin Protection: Rubber gloves.

Eye Protection: Goggles or safety glasses with side shields.

Other protective equipment: Not required under normal use.

Hygienic Practices: Remove and wash contaminated clothing before re-use. Wash hands before breaks and at the end of workday.

Section 9 - Physical And Chemical Properties

Boiling Range:	Not Established	Vapor Density:	Heavier Than Air
Odor:	Very Slight Ammonia	Odor Threshold:	Not Established
Appearance:	Colored	Evaporation Rate:	Slower Than n-Butyl Acetate
Solubility in H₂O:	Not Established	Specific Gravity:	1.49
Freeze Point:	Not Established	pH:	Between 7.0 and 12.0
Vapor Pressure:	Not Established	Viscosity:	Not Established
Physical State:	Paste		

When reported, vapor pressure of this product has been calculated theoretically based on its constituent makeup and has not been determined experimentally.

(See section 16 for abbreviation legend)

Section 10 - Stability And Reactivity

Conditions To Avoid: Excessive heat and freezing.

Incompatibility: Incompatible with strong bases and oxidizing agents.

Hazardous Decomposition Products: Normal decomposition products, i.e., CO_x, NO_x.

Hazardous Polymerization: Hazardous polymerization will not occur under normal conditions.

Stability: Stable under recommended storage conditions.

Section 11 - Toxicological Information

Product LD50: Not Established

Product LC50: Not Established

CASRN	Chemical Name	LD50	LC50	WT%
PHthalate ESTER	Ester Branched & Linear(C7&C9)	Oral Rat: 10 mg/kg	-----	1-5
107-21-1	Ethylene glycol	Rat:4700 mg/kg	Rat:10876 mg/kg	0.5-1.5
7664-41-7	Ammonia	-----	Rat:2000 ppm/4H	<0.010
50-00-0	Formaldehyde	-----	Rat:203 mg/m3	<0.03
140-88-5	Ethyl acrylate	-----	Rat:1414 ppm/4H	<0.02
75-07-0	Acetaldehyde	-----	Rat:13300 ppm/4H	<0.003
107-13-1	Acrylonitrile	Oral Rat:78 mg/kg	Rat:425 ppm/4H	<0.0004

Carcinogenicity:

CAS No.	Chemical Name	ACGIH	OSHA	IARC	NTP	WT%
13463-67-7	Titanium dioxide	-----	-----	Classification not possible from current data.	-----	1-5
14808-60-7	Silica, crystalline	Suspected human carcinogen.	-----	-----	Known carcinogen.	0.1-1.0
50-00-0	Formaldehyde	Suspected human carcinogen.	Potential cancer hazard.	Human carcinogen.	Anticipated carcinogen.	<0.03
140-88-5	Ethyl acrylate	-----	-----	Possible carcinogen.	-----	<0.02

75-07-0	Acetaldehyde	Confirmed animal carcinogen with unknown relevance to humans.	----	Possible carcinogen.	Anticipated carcinogen.	<0.003
107-13-1	Acrylonitrile	Confirmed animal carcinogen with unknown relevance to humans.	Cancer hazard.	Possible carcinogen.	Anticipated carcinogen.	<0.0004
79-06-1	Acrylamide	Confirmed animal carcinogen with unknown relevance to humans.	----	Probable carcinogen.	Anticipated carcinogen.	<0.0001

Significant Data with Possible Relevance to Humans: This product contains trace amounts of acrylonitrile. It is exempt from the OSHA acrylonitrile standard 29 CFR 1910.1045, paragraph (a) (2) (ii). Acrylonitrile has been classified by IARC as possibly carcinogenic to humans, by OSHA as carcinogenic and by NTP as reasonably anticipated to be a human carcinogen.

This product contains trace amounts of free formaldehyde. OSHA and NTP identify formaldehyde as a potential carcinogen. IARC identifies formaldehyde as a human carcinogen. Formaldehyde has been shown to cause mutations in a variety of in-vitro test systems, the significance of which to humans is unknown. There should be minimal risk when used with ventilation adequate to keep the atmospheric concentration of formaldehyde below the recommended exposure limits. Maintain adequate ventilation to prevent exposure above current OSHA / ACGIH exposure limits. Workplace monitoring of the air to define formaldehyde exposure levels may be necessary.

Section 12 - Ecological Information

Ecological Information: Ecological injuries are not known or expected under normal use.

Section 13 - Disposal Information

Disposal Information: Dispose of material in accordance with all federal, state and local regulations. State and Local regulations/restrictions are complex and may differ from Federal regulations. Responsibility for proper waste disposal is with the owner of the waste.

EPA Waste Code if Discarded (40 CFR Section 261): This product does not meet the definition of a hazardous waste according to U.S. EPA Hazardous Waste Management Regulation, 40 CFR Section 261.

Section 14 - Transportation Information

DOT Proper Shipping Name:	Not Regulated	Packing Group:	N.A.
DOT Technical Name:	N.A.	Hazard Subclass:	N.A.
DOT Hazard Class:	N.A.	DOT UN/NA Number:	N.A.

Note: The shipping information provided is applicable for domestic ground transport only. Different categorization may apply if shipped via other modes of transportation and/or to non-domestic destinations.

Section 15 - Regulatory Information

CERCLA - SARA Hazard Category:

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and

312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Immediate Health Hazard

Chronic Health Hazard

SARA Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

Chemical Name	CAS Number	WT%
Ethylene glycol	107-21-1	0.5-1.5

Toxic Substances Control Act:

All ingredients in this product are either on TSCA inventory list, or otherwise exempt.

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

None

U.S. State Regulations

New Jersey Right-to-Know:

The following materials are non-hazardous, but are among the top five components in this product:

Chemical Name	CAS Number	WT%
Non-Hazardous Polymer	Proprietary	15-40
Water	7732-18-5	10-30

Pennsylvania Right-to-Know:

The following non-hazardous ingredients are present in the product at greater than 3%:

Chemical Name	CAS Number	WT%
Non-Hazardous Polymer	Proprietary	15-40
Water	7732-18-5	10-30

California Proposition 65:

Warning: The following ingredients present in the product are known to the State of California to cause cancer:

Chemical Name	CAS Number	Definition	Date Listed	WT%
Silica, crystalline	14808-60-7	Carcinogenic.	Listed: October 1, 1988	0.1-1.0
Formaldehyde	50-00-0	Carcinogenic.	Listed: January 1, 1988	<0.03
Ethyl acrylate	140-88-5	Carcinogenic.	Listed: July 1, 1989	<0.02
Acetaldehyde	75-07-0	Carcinogenic.	Listed: April 1, 1988	<0.003
Acrylonitrile	107-13-1	Carcinogenic.	Listed: July 1, 1987	<0.0004
Acrylamide	79-06-1	Carcinogenic.	Listed: January 1, 1990	<0.0001

Warning: The following ingredients present in the product are known to the State of California to cause birth defects or other reproductive harm:

None

Section 16 - Other Information

HMIS Ratings:

Health: 1 Flammability: 1 Reactivity: 0 Personal Protection: X

VOLATILE ORGANIC COMPOUNDS, GR/LTR: 23.5 LB/GAL: 0.2 WT%: 1.132

REASON FOR REVISION: Periodic Update

Legend:

N.A. – Not Applicable	ACGIH – American Conference of Governmental Industrial Hygienists
N.E. – Not Established	SARA – Superfund Amendments and Reauthorization Act of 1986
N.D. – Not Determined	NJRTK – New Jersey Right-to-Know Law
VOC – Volatile Organic Compound	OSHA – Occupational Safety and Health Administration
PEL – Permissible Exposure Limit	HMIS – Hazardous Materials Identification System
TLV – Threshold Limit Value	NTP – National Toxicology Program
STEL – Short Term Exposure Limit	CEIL – Ceiling Exposure Limit
LD50 – Lethal Dose 50	LC50 – Lethal Concentration 50
F – Degree Fahrenheit	C – Degree Celsius
MSDS – Material Safety Data Sheet	CASRN – The Chemical Abstracts Service Registry Number

DAP believes the data and statements contained herein are accurate as of the date hereof. They are offered in good faith as typical values and not as a product specification. **NO WARRANTY OF MERCHANTABILITY, WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE WITH REGARD TO THE INFORMATION HEREIN PROVIDED OR THE PRODUCT TO WHICH THE INFORMATION REFERS.** Since this document is intended only as a guide to the appropriate use and precautionary handling of the referenced product by a properly trained person, it is therefore the responsibility of the user to (i) review the recommendations with due consideration for the specific context of the intended use and (ii) determine if they are appropriate.

<End of MSDS>